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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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KATSUYOSHI HAYASHI

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07/02/2004

MORGAN LEWIS & BOCKIUS LLP  
1111 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20004

EXAMINER

TRAN, THAI Q

ART UNIT

PAPER NUMBER

2615

13

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/315,980

**Applicant(s)**

HAYASHI ET AL.

**Examiner**

Thai Tran

**Art Unit**

2615

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-6 and 9-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 4-6 and 17-22 is/are allowed.  
6) ☒ Claim(s) 9-16 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 02, 2004 has been entered.

### *Response to Arguments*

2. Applicant's arguments filed June 02, 2004 have been fully considered but they are not persuasive.

In re pages 8-9, applicants argue, with respect to claims 9-16, that Khavakh et al discloses a system for storing roads in bands within a database rather than disclosing an apparatus in which information is stored in the recording layers of a recording medium.

In response, the examiner respectfully disagrees. First at all, it is noted that claims recite "recording layers". The claimed "recording layers" **may not be** physical layers of the recording medium and **can be** data layers recorded on the recording medium such as Khavakh et al.

As previously discussed, Khavakh et al discloses in page 3, paragraph #0036 that "In one embodiment ... the map database 30 for a geographical area may be stored in layers. The lowest layer ("0") contains records that represent roadways of all ranks,

the next higher layer ("1") contains roadways of rank "1" and higher, the next higher layer ("2") contains roadways of rank "2" and higher, and so on." From the above passage, rank "0" is recorded in layer ("0"), rank "1" is recorded in layer ("1"), rank "2" is recorded in layer ("2"), and so on. It is noted that the navigation information for maps of Khavakh et al having same attribute is recorded on the same layer (rank "1" is recorded in layer ("1")).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 9-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khavakh et al (US 2003/0028319 A1) in view of Sawabe et al (US

2002/0176695 A1) as set forth in paragraph #7 of the Final Office Action mailed Oct. 03, 2003.

Regarding claim 9, Khavakh et al discloses an information reproducing apparatus (Fig. 1) for reproducing information from a recording medium having a plurality of recording layers (data layers disclosed in page 3, paragraph #0036), on each of which navigation information is recorded, wherein navigation information having a same attribute is recorded in a same one of the plurality of recording layers (page 2, paragraph #0034 and page 3, paragraph #0036), the apparatus comprising:

reproducing means (reading map database 30 disclosed in page 2, paragraphs #0033 and #0034) for reproducing the navigation information from each of the recording layers of the recording medium. However, Khavakh et al does not specifically disclose means for emitting a light beam for reading the navigation information from the recording medium; focus control means for controlling a position of the light beam in a focus direction; and tracking control means for controlling the position of the light beam in a tracking direction.

Sawabe et al teaches a DVD player having means (an optical pickup 80 of Fig. 8, page 10, paragraph #0143 and page 11, paragraph #0146) for emitting a light beam for reading the information from the recording medium; focus control means (focus servo control disclosed in page 11, paragraph #0146) for controlling a position of the light beam in a focus direction; and tracking control means (tracking servo control disclosed in page 11, paragraph #0146) so that the light beam of the reproducing head can be

irradiated precisely onto the information track and can be focused on the information record surface of the DVD 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the DVD player as taught by Sawabe et al into Khavakh et al's system in order to accurately reproducing the video signal recorded on the DVD by controlling the focusing and tracking of the reproducing head.

Regarding claim 10, Khavakh et al also discloses the claimed wherein the plurality of navigation information includes first map data corresponding to a first area and second map data corresponding to a second area that is different from the first area (data layers disclosed in page 3, paragraph #0036), and wherein the first map data is recorded on one of the recording layers, and the second map data is recorded on another one of the plurality of recording layers (data layers disclosed in page 3, paragraph #0036).

Regarding claim 11, Khavakh et al further discloses the claimed wherein the plurality of navigation information includes map data corresponding to a plurality of scales (roadway ranks disclosed in page 3, paragraph #0036), and wherein the map data having a same scale is recorded on the same one of the plurality of recording layers (roadway ranks and data layers disclosed in page 3, paragraph #0036).

Regarding claim 12, Khavakh et al discloses the claimed wherein the plurality of navigation information includes route search data and location search data (node data and segment data disclosed in pages 2-3, paragraph #0035), and wherein the route search data is recorded on one of the plurality of recording layers and the location

search data is recorded on another one of the plurality of recording layers (node data and segment data disclosed in pages 2-3, paragraph #0035).

Regarding claim 15, Khavakh et al discloses an information reproducing apparatus (Fig. 1) for reproducing information from a recording medium having a plurality of recording layers (data layers disclosed in page 3, paragraph #0036), in which there are a plurality of areas and on each of which navigation information is recorded (data layers disclosed in page 3, paragraph #0036), wherein navigation information having a same attribute is recorded in a same area of each of the plurality of recording players (page 2, paragraph #0034 and page 3, paragraph #0036), the apparatus comprising:

reproducing means (reading map database 30 disclosed in page 2, paragraphs #0033 and #0034) for reproducing the navigation information from each of the recording layers of the recording medium. However, Khavakh et al does not specifically disclose means for emitting a light beam for reading the navigation information from the recording medium; focus control means for controlling a position of the light beam in a focus direction; and tracking control means for controlling the position of the light beam in a tracking direction.

Sawabe et al teaches a DVD player having means (an optical pickup 80 of Fig. 8, page 10, paragraph #0143 and page 11, paragraph #0146) for emitting a light beam for reading the information from the recording medium; focus control means (focus servo control disclosed in page 11, paragraph #0146) for controlling a position of the light beam in a focus direction; and tracking control means (tracking servo control disclosed

in page 11, paragraph #0146) so that the light beam of the reproducing head can be irradiated precisely onto the information track and can be focused on the information record surface of the DVD 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the DVD player as taught by Sawabe et al into Khavakh et al's system in order to accurately reproducing the video signal recorded on the DVD by controlling the focusing and tracking of the reproducing head.

Regarding claim 16, Khavakh et al also discloses the claimed wherein the navigation information includes first map data corresponding to an area at a first scale and second map data corresponding to the area at a second scale that is different from the first area (roadway ranks and data layers disclosed in page 3, paragraph #0036), and wherein the first map and the second map data are recorded on one of the recording layers and another one of the recording layers, respectively, in the same area (roadway ranks and data layers disclosed in page 3, paragraph #0036).

5. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khavakh et al in view of Sawabe et al as applied to claim 9 above, and further in view of LaRue (US 5,274,560).

Regarding claim 13, the combination of Khavakh et al and Sawabe et al discloses all the claimed limitations as discussed in claim 9 above except for providing voice data associated with the map data, and voice data independent of map data, and wherein the map data and the voice data associated with the map data are recorded on



one of the plurality of recording layers and the voice data independent of the map data is recorded on another one of the plurality of recording layers.

LaRue teaches, in a sensor free vehicle navigation system utilizing a voice input/output interface for routing a driver from his source point to his destination point, having storing therein voice data associated with the map data and voice data independent of map data (col. 8, lines 28-36 and from col. 12, line 49 to col. 14, line 34) so that the user can use the navigation without dangerous distraction.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the navigation system with the voice input/output interface as taught by LaRue into Khavakh et al's system in order to increase the safety of the passengers when using the navigation system.

Regarding claim 14, the combination of Khavakh et al and Sawabe et al discloses all the claimed limitations as discussed in claim 9 above except for providing that the navigation information includes map data and voice data, and wherein the map data is recorded on one of the plurality of recording layers and the voice data is recorded on another one of the plurality of recording layers.

LaRue teaches, in a sensor free vehicle navigation system utilizing a voice input/output interface for routing a driver from his source point to his destination point, having storing therein voice data associated with the map data and voice data independent of map data (col. 8, lines 28-36 and from col. 12, line 49 to col. 14, line 34) so that the user can use the navigation without dangerous distraction.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the navigation system with the voice input/output interface as taught by LaRue into Khavakh et al's system in order to increase the safety of the passengers when using the navigation system.

***Allowable Subject Matter***

6. Claims 4-6 and 17-22 are allowed.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTQ



THAI TRAN  
PRIMARY EXAMINER